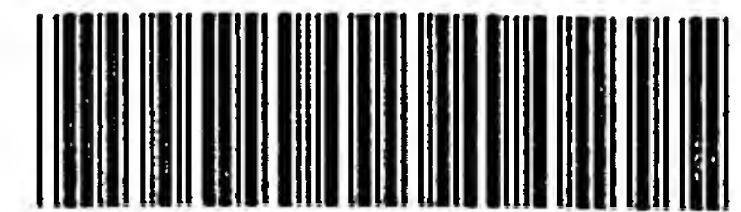


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/591,628
Source: IFWP
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PATENT APPLICATION: US/10/591,628

DATE: 09/13/2006

TIME: 11:11:47

Input Set : A:\A0852.70000US01 seq.txt
 Output Set: N:\CRF4\09132006\J591628.raw

3 <110> APPLICANT: Adra, Chaker
 5 <120> TITLE OF INVENTION: GRANULOCYTE SUBTYPE-SELECTIVE RECEPTORS AND ION CHANNELS AND
 USES
 6 THEREOF
 8 <130> FILE REFERENCE: A0852.70000W000
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/591,628
 11 <141> CURRENT FILING DATE: 2006-09-05
 13 <150> PRIOR APPLICATION NUMBER: PCT/US2005/007519
 14 <151> PRIOR FILING DATE: 2005-03-03
 16 <150> PRIOR APPLICATION NUMBER: 60/549,865
 17 <151> PRIOR FILING DATE: 2004-03-03
 19 <160> NUMBER OF SEQ ID NOS: 31
 21 <170> SOFTWARE: PatentIn version 3.3
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 557
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Homo sapiens
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 31 ctgttagtgtc aagttctttc aaacttaaaa ttttaacccc agaggattt cgctgaataa 120
 33 atgagaattg gctctatttc ttctacttct ggatagcccg agtaaaaata ctaataattt 180
 35 ctagatttta gtggggaaact acaattatta ggacccatgg atattgctgc agttcaaata 240
 37 caatacagta attacaaaat atagaccatc tctttacaaa tacaaattat agtatattac 300
 39 aagtcatgta cagtaaatct ataattttaa acaaactagt gtatctaagt ttacctgggt 360
 41 gcgagtgcattattattcca gttacagtt gcccttagcg tgacagtcag aaaccgacca 420
 43 tcggagtgtat attctcttat gtaaactggc gtcacatcac agaaaacctt atttatgagg 480
 45 tcccattgcc ctcgcaataa tcactggtag ctgggttctg acttacttac acaccgtatt 540
 47 tcagaacagc taaacag 557
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 52 <212> TYPE: DNA
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 57 <222> LOCATION: (71)..(1198)
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 63 Met Asp Ala Ile His Ile Gly Met Ser Ser Thr Pro Leu
 64 1 5 10
 66 gtg aag cac act gct ggg ctc aag gcc aac aga ccc cgc gtc 157
 67 Val Lys His Thr Ala Gly Ala Gly Leu Lys Ala Asn Arg Pro Arg Val
 68 15 20 25
 70 atg tcc aag agt ggg cac agc aac gtg aga att gac aaa gtg gat ggc 205

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PATENT APPLICATION: US/10/591,628

DATE: 09/13/2006
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Output Set: N:\CRF4\09132006\J591628.raw

71	Met	Ser	Lys	Ser	Gly	His	Ser	Asn	Val	Arg	Ile	Asp	Lys	Val	Asp	Gly	
72	30				35				40				45				
74	ata	tac	cta	ctc	tac	ctg	caa	gac	ctg	tgg	acc	aca	gtt	atc	gac	atg	253
75	Ile	Tyr	Leu	Leu	Tyr	Leu	Gln	Asp	Leu	Trp	Thr	Thr	Val	Ile	Asp	Met	
76					50				55				60				
78	aag	tgg	aga	tac	aaa	ctc	acc	ctg	ttc	gct	gcc	act	ttt	gtg	atg	acc	301
79	Lys	Trp	Arg	Tyr	Lys	Leu	Thr	Leu	Phe	Ala	Ala	Thr	Phe	Val	Met	Thr	
80					65				70				75				
82	tgg	ttc	ctt	ttt	gga	gtc	atc	tac	tat	gcc	atc	gcg	ttt	att	cat	ggg	349
83	Trp	Phe	Leu	Phe	Gly	Val	Ile	Tyr	Tyr	Ala	Ile	Ala	Phe	Ile	His	Gly	
84					80				85				90				
86	gac	tta	gaa	ccc	gat	gag	ccc	att	tca	aat	cat	acc	ccc	tgc	atc	atg	397
87	Asp	Leu	Glu	Pro	Asp	Glu	Pro	Ile	Ser	Asn	His	Thr	Pro	Cys	Ile	Met	
88					95				100				105				
90	aaa	gtg	gac	tct	ctc	act	ggg	gct	ttt	ctc	ttt	tcc	ctg	gaa	tcc	cag	445
91	Lys	Val	Asp	Ser	Leu	Thr	Gly	Ala	Phe	Leu	Phe	Ser	Leu	Glu	Ser	Gln	
92	110				115				120				125				
94	aca	acc	att	ggc	tat	gga	gtc	cgt	tcc	atc	aca	gag	gaa	tgt	cct	cat	493
95	Thr	Thr	Ile	Gly	Tyr	Gly	Val	Arg	Ser	Ile	Thr	Glu	Glu	Cys	Pro	His	
96					130				135				140				
98	gcc	atc	ttc	ctg	ttg	gtt	gtc	cag	ttg	gtc	atc	acg	acc	ttg	att	gag	541
99	Ala	Ile	Phe	Leu	Leu	Val	Ala	Gln	Leu	Val	Ile	Thr	Thr	Leu	Ile	Glu	
100					145				150				155				
102	atc	ttc	atc	acc	gga	acc	ttc	ctg	gcc	aaa	atc	gcc	aga	ccc	aaa	aag	589
103	Ile	Phe	Ile	Thr	Gly	Thr	Phe	Leu	Ala	Lys	Ile	Ala	Arg	Pro	Lys	Lys	
104					160				165				170				
106	cgg	gct	gag	acc	atc	aag	ttc	agc	cac	tgt	gca	gtc	atc	acc	aag	cag	637
107	Arg	Ala	Glu	Thr	Ile	Lys	Phe	Ser	His	Cys	Ala	Val	Ile	Thr	Lys	Gln	
108					175				180				185				
110	aat	ggg	aag	ctg	tgc	ttg	gtg	att	cag	gta	gcc	aat	atg	agg	aag	agc	685
111	Asn	Gly	Lys	Leu	Cys	Leu	Val	Ile	Gln	Val	Ala	Asn	Met	Arg	Lys	Ser	
112	190				195				200				205				
114	ctc	ttg	att	cag	tgc	cag	ctc	tct	ggc	aag	ctc	ctg	cag	acc	cac	gtc	733
115	Leu	Leu	Ile	Gln	Cys	Gln	Leu	Ser	Gly	Lys	Leu	Leu	Gln	Thr	His	Val	
116					210				215				220				
118	acc	aag	ggg	gag	cgg	att	ctc	ctc	aac	caa	gcc	act	gtc	aaa	ttc		781
119	Thr	Lys	Glu	Gly	Glu	Arg	Ile	Leu	Leu	Asn	Gln	Ala	Thr	Val	Lys	Phe	
120					225				230				235				
122	cac	gtg	gac	tcc	tcc	tct	gag	agc	ccc	ttc	ctc	att	ctg	ccc	atg	aca	829
123	His	Val	Asp	Ser	Ser	Ser	Glu	Ser	Pro	Phe	Leu	Ile	Leu	Pro	Met	Thr	
124					240				245				250				
125	ttc	tac	cat	gtg	ctg	gat	gag	acg	agc	ccc	ctg	aga	gac	ctc	aca	ccc	877
126	Phe	Tyr	His	Val	Leu	Asp	Glu	Thr	Ser	Pro	Leu	Arg	Asp	Leu	Thr	Pro	
127					255				260				265				
129	caa	aac	cta	aag	gag	aag	gag	ttt	gag	ctt	gtg	gtc	ctc	ctc	aat	gcc	925
130	Gln	Asn	Leu	Lys	Glu	Lys	Glu	Phe	Glu	Leu	Val	Val	Leu	Leu	Asn	Ala	
131	270				275				280				285				
133	act	gtg	gaa	tcc	acc	agc	gct	gtc	tgc	cag	agc	cga	aca	tct	tat	atc	973
134	Thr	Val	Glu	Ser	Thr	Ser	Ala	Val	Cys	Gln	Ser	Arg	Thr	Ser	Tyr	Ile	

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PATENT APPLICATION: US/10/591,628

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Output Set: N:\CRF4\09132006\J591628.raw

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137 cca gag gaa atc tac tgg ggt ttt gag ttt gtg cct gtg gta tct ctc				1021
138 Pro Glu Glu Ile Tyr Trp Gly Phe Glu Phe Val Pro Val Val Ser Leu				
139 305	310	315		
141 tcc aaa aat gga aaa tat gtg gct gat ttc agt cag ttt gaa cag att				1069
142 Ser Lys Asn Gly Lys Tyr Val Ala Asp Phe Ser Gln Phe Glu Gln Ile				
143 320	325	330		
145 cgg aaa agc cca gat tgc aca ttt tac tgt gca gat tct gag aaa cag				1117
146 Arg Lys Ser Pro Asp Cys Thr Phe Tyr Cys Ala Asp Ser Glu Lys Gln				
147 335	340	345		
149 caa ctc gag gag aag tac agg cag gag gat cag agg gaa aga gaa ctg				1165
150 Gln Leu Glu Glu Lys Tyr Arg Gln Glu Asp Gln Arg Glu Arg Glu Leu				
151 350	355	360	365	
153 agg aca ctt tta tta caa cag agc aat gtc tga tcacagggc gccatccagg				1218
154 Arg Thr Leu Leu Gln Gln Ser Asn Val				
155 370	375			
157 tttaaccctg caagctgttt ccacatcaga actcccttca aacacaaaga ttgctgtgaa				1278
159 aacaaaaatg ttagacgca ctctaaaaaa ctgcacggac atacaaaatc aatctttcc				1338
161 tttgatcttg tggctaaacc agcattctg tggtttagag atttcctgtt aggtgcttcg				1398
163 tctgaaagtg aactctcata attcaaattg tataaaataa agctacattt ctaagagctt				1458
165 ggttagggc aatttggata atgcctgtt agataaacag acatatttca atgctgacat				1518
167 taaaaggaaa tgtatttcta tacaagatta ttagctgtaa tacaagatat ttatccaacc				1578
169 aatgaccta tggctgagag ttgaatttgc gttca				1613
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173 <211> LENGTH: 375				
174 <212> TYPE: PRT				
175 <213> ORGANISM: Homo sapiens				
177 <400> SEQUENCE: 3				
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180 1 5 10 15				
183 Thr Ala Gly Ala Gly Leu Lys Ala Asn Arg Pro Arg Val Met Ser Lys				
184 20 25 30				
187 Ser Gly His Ser Asn Val Arg Ile Asp Lys Val Asp Gly Ile Tyr Leu				
188 35 40 45				
191 Leu Tyr Leu Gln Asp Leu Trp Thr Thr Val Ile Asp Met Lys Trp Arg				
192 50 55 60				
195 Tyr Lys Leu Thr Leu Phe Ala Ala Thr Phe Val Met Thr Trp Phe Leu				
196 65 70 75 80				
199 Phe Gly Val Ile Tyr Tyr Ala Ile Ala Phe Ile His Gly Asp Leu Glu				
200 85 90 95				
203 Pro Asp Glu Pro Ile Ser Asn His Thr Pro Cys Ile Met Lys Val Asp				
204 100 105 110				
207 Ser Leu Thr Gly Ala Phe Leu Phe Ser Leu Glu Ser Gln Thr Thr Ile				
208 115 120 125				
211 Gly Tyr Gly Val Arg Ser Ile Thr Glu Glu Cys Pro His Ala Ile Phe				
212 130 135 140				
215 Leu Leu Val Ala Gln Leu Val Ile Thr Thr Leu Ile Glu Ile Phe Ile				
216 145 150 155 160				
219 Thr Gly Thr Phe Leu Ala Lys Ile Ala Arg Pro Lys Lys Arg Ala Glu				

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PATENT APPLICATION: US/10/591,628

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220	165	170	175	
223	Thr Ile Lys Phe Ser His Cys Ala Val Ile Thr Lys Gln Asn Gly Lys			
224	180	185	190	
227	Leu Cys Leu Val Ile Gln Val Ala Asn Met Arg Lys Ser Leu Leu Ile			
228	195	200	205	
231	Gln Cys Gln Leu Ser Gly Lys Leu Leu Gln Thr His Val Thr Lys Glu			
232	210	215	220	
235	Gly Glu Arg Ile Leu Leu Asn Gln Ala Thr Val Lys Phe His Val Asp			
236	225	230	235	240
239	Ser Ser Ser Glu Ser Pro Phe Leu Ile Leu Pro Met Thr Phe Tyr His			
240	245	250	255	
243	Val Leu Asp Glu Thr Ser Pro Leu Arg Asp Leu Thr Pro Gln Asn Leu			
244	260	265	270	
247	Lys Glu Lys Glu Phe Glu Leu Val Val Leu Leu Asn Ala Thr Val Glu			
248	275	280	285	
249	Ser Thr Ser Ala Val Cys Gln Ser Arg Thr Ser Tyr Ile Pro Glu Glu			
250	290	295	300	
253	Ile Tyr Trp Gly Phe Glu Phe Val Pro Val Val Ser Leu Ser Lys Asn			
254	305	310	315	320
257	Gly Lys Tyr Val Ala Asp Phe Ser Gln Phe Glu Gln Ile Arg Lys Ser			
258	325	330	335	
261	Pro Asp Cys Thr Phe Tyr Cys Ala Asp Ser Glu Lys Gln Gln Leu Glu			
262	340	345	350	
265	Glu Lys Tyr Arg Gln Glu Asp Gln Arg Glu Arg Glu Leu Arg Thr Leu			
266	355	360	365	
269	Leu Leu Gln Gln Ser Asn Val			
270	370	375		
273	<210> SEQ ID NO: 4			
274	<211> LENGTH: 5397			
275	<212> TYPE: DNA			
276	<213> ORGANISM: Homo sapiens			
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279	<221> NAME/KEY: CDS			
280	<222> LOCATION: (384)..(1667)			
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287	acccccact tccactccat gtccccatgc tcctgcgccca gcaacaggac atgttctctg	180		
289	gatgtcagct gagtcattaa agtaactctg catgtcagta gacagacatt ggtagaacca	240		
291	caaggctccc agagacaccc atctctccctc attttttgg tgtgtgtgc ttcaccgaac	300		
293	attcaaaaact gtttctccaa agcgaaaaactcag actgttttcc aaaggcagaag	360		
295	cactggagtc cccagcagaa gcg atg ggc agt gtg cga acc aac cgc tac agc	413		
296	Met Gly Ser Val Arg Thr Asn Arg Tyr Ser			
297	1 5 10			
299	atc gtc tct tca gaa gaa gac ggt atg aag ttg gcc acc atg gca gtt	461		
300	Ile Val Ser Ser Glu Glu Asp Gly Met Lys Leu Ala Thr Met Ala Val			
301	15 20 25			
303	gca aat ggc ttt ggg aac ggg aag agt aaa gtc cac acc cga caa cag	509		
304	Ala Asn Gly Phe Gly Asn Gly Lys Ser Lys Val His Thr Arg Gln Gln			

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/591,628

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308	Cys Arg Ser Arg Phe Val Lys Lys Asp Gly His Cys Asn Val Gln Phe			
309	45	50	55	
311	atc aat gtg ggt gag aag ggg caa cgg tac ctc gca gac atc ttc acc			605
312	Ile Asn Val Gly Glu Lys Gly Gln Arg Tyr Leu Ala Asp Ile Phe Thr			
313	60	65	70	
315	acg tgt gtg gac att cgc tgg cgg tgg atg ctg gtt atc ttc tgc ctg			653
316	Thr Cys Val Asp Ile Arg Trp Arg Trp Met Leu Val Ile Phe Cys Leu			
317	75	80	85	90
319	gct ttc gtc ctg tca tgg ctg ttt ttt ggc tgt gtg ttt tgg ttg ata			701
320	Ala Phe Val Leu Ser Trp Leu Phe Phe Gly Cys Val Phe Trp Leu Ile			
321	95	100	105	
323	gct ctg ctc cat ggg gac ctg gat gca tcc aaa gag ggc aaa gct tgt			749
324	Ala Leu Leu His Gly Asp Leu Asp Ala Ser Lys Glu Gly Lys Ala Cys			
325	110	115	120	
327	gtg tcc gag gtc aac agc ttc acg gct gcc ttc ctc ttc tcc att gag			797
328	Val Ser Glu Val Asn Ser Phe Thr Ala Ala Phe Leu Phe Ser Ile Glu			
329	125	130	135	
331	acc cag aca acc ata ggc tat ggt ttc aga tgt gtc acg gat gaa tgc			845
332	Thr Gln Thr Thr Ile Gly Tyr Gly Phe Arg Cys Val Thr Asp Glu Cys			
333	140	145	150	
335	cca att gct gtt ttc atg gtg gtg ttc cag tca atc gtg ggc tgc atc			893
336	Pro Ile Ala Val Phe Met Val Val Phe Gln Ser Ile Val Gly Cys Ile			
337	155	160	165	170
339	atc gat gct ttc atc att ggc gca gtc atg gcc aag atg gca aag cca			941
340	Ile Asp Ala Phe Ile Ile Gly Ala Val Met Ala Lys Met Ala Lys Pro			
341	175	180	185	
343	aag aag aga aac gag act ctt gtc ttc agt cac aat gcc gtg att gcc			989
344	Lys Lys Arg Asn Glu Thr Leu Val Phe Ser His Asn Ala Val Ile Ala			
345	190	195	200	
347	atg aga gac ggc aag ctg tgt ttg atg tgg cga gtg ggc aat ctt cgg			1037
348	Met Arg Asp Gly Lys Leu Cys Leu Met Trp Arg Val Gly Asn Leu Arg			
349	205	210	215	
351	aaa agc cac ttg gtg gaa gct cat gtt cga gca cag ctc ctc aaa tcc			1085
352	Lys Ser His Leu Val Glu Ala His Val Arg Ala Gln Leu Leu Lys Ser			
353	220	225	230	
355	aga att act tct gaa ggg gag tat atc cct ctg gat caa ata gac atc			1133
356	Arg Ile Thr Ser Glu Gly Glu Tyr Ile Pro Leu Asp Gln Ile Asp Ile			
357	235	240	245	250
359	aat gtt ggg ttt gac agt gga atc gat cgt ata ttt ctg gtg tcc cca			1181
360	Asn Val Gly Phe Asp Ser Gly Ile Asp Arg Ile Phe Leu Val Ser Pro			
361	255	260	265	
363	atc act ata gtc cat gaa ata gat gaa gac agt cct tta tat gat ttg			1229
364	Ile Thr Ile Val His Glu Ile Asp Glu Asp Ser Pro Leu Tyr Asp Leu			
365	270	275	280	
367	agt aaa cag gac att gac aac gca gac ttt gaa atc gtg gtc ata ctg			1277
368	Ser Lys Gln Asp Ile Asp Asn Ala Asp Phe Glu Ile Val Val Ile Leu			
369	285	290	295	

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/591,628

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TIME: 11:11:48

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L:10 M:270 C: Current Application Number differs, Replaced Current Application Number